LTCC Advanced Course

Title: Nonlinear Free Surface Flows with Gravity and Surface Tension

Basic Details:

- Core Audience: 1st, 2nd and 3rd year app.
- Course Format: Extended: 5 x 2hr lectures

Course Description:

- Keywords: free surface flows, gravity, surface tension.

- Syllabus: This course is concerned with the computation of nonlinear free surface flows. Both the effects of surface tension and gravity are included in the dynamic boundary condition. Special attention is devoted to the singular behaviour at the points where free surfaces intersect rigid walls.

- Recommended reading:
  J.-M. Vanden-Broeck, Gravity-Capillary Free Surface Flows. Cambridge University Press.

Lecturer Details:

- Lecturer: Professor Jean-Marc Vanden-Broeck
- Lecturer home institution: UCL
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